CHANCROID

A. GENERAL CONSIDERATIONS

Chancroid is a sexually transmitted disease caused by Hemophilus ducreyi. The incubation time is from 3-5 days.

B. ESSENTIALS OF DIAGNOSIS

1. The first lesion is a small inflammatory papule. This ulcerates within 2 - 3 days.
2. The chancroid ulcer is painful with erythematous borders and a necrotic base. The size varies from several millimeters to several centimeters.
3. The ulcers are not indurated.
4. About 50% of the patients show fever, malaise and headache.
5. About 50% of the patients show swollen, tender inguinal adenopathy (usually unilateral).

C. LABORATORY TESTS

1. C&S (not available on your ship).
2. RPR, repeat in 6 weeks.
3. Gram stain.

D. LABORATORY FINDINGS

1. Required for definitive diagnosis.
2. To R/O syphilis.
3. Gram negative rods suggest possible H. ducreyi.

E. COMPLICATIONS

1. Secondary infections.
2. Buboes.

F. TREATMENT

1. Erythromycin 500mg PO qid x 7 days or you can use Ceftriaxone 250mg IM (single dose).
2. Alternative is Bactrim 2 tablets (or 1 DS tablet) PO bid x 7 days.
3. Clean ulcers daily with soap and water.

G. DISPOSITION

1. Complete a venereal disease report.
2. All contacts should seek treatment.
3. If complications develop or the patient does not respond to therapy, contact a Medical Officer.

CYSTITIS

A. GENERAL CONSIDERATIONS

Acute bacterial cystitis is an infection of the bladder. The infectious agent is E. coli is 85% of uncomplicated cases. The infection usually ascends from the urethra. It is, therefore, a common disease in females.

B. ESSENTIALS OF DIAGNOSIS

1. Dysuria, urgency, frequency, nocturia predominate.
2. Suprapubic and low back pain are common.
3. Fever is unusual (if present it is low grade).

C. LABORATORY TESTS

1. Urinalysis.
2. Gram stain of urinary sediment.
3. C&S of urine if facilities are available.

D. LABORATORY FINDINGS

1. Pyuria, bacteriuria, gross or microscopic hematuria.
2. Indicates the organism.
3. Identifies the organism.

E. COMPLICATION

1. The primary complication is pyelonephritis.

F. TREATMENT

1. Antibiotics: choose one

   a. Sulfamethoxazole-trimethoprim one tablet PO bid for 10 days.
   b. Ampicillin 250mg PO qid for 10 days.

2. Encourage high fluid intake.
3. If gross hematuria was present, repeat urinalysis in 3-4 days to see if it is clearing.
4. Repeat urinalysis 2-3 days after completion of medication.
5. Pyridium may be used to relieve the symptoms (1 tablet PO qid x 2 days).

G. DISPOSITION

1. If complications develop, contact a Medical Officer. For Pyelonephritis, begin 80mg of Gentamicin IV (TID) after contact with a Medical Officer (when possible).
2. If both the antibiotics listed in the treatment section above fail to affect a cure, contact a Medical Officer.

EPIDIDYMITIS

A. GENERAL CONSIDERATIONS

Most cases of epididymitis can be divided into one of two categories:

1) sexually transmitted - associated with urethritis (C. trachomatis and N. gonorrhea).
2) non-sexually transmitted - associated with UTI's and prostatitis (enteric and cutaneous bacteria).

Other causes include reflux of sterile urine (chemical epididymitis) from the urethra, tuberculous epididymitis and epididymal inflammation from trauma (including vasectomy).

B. ESSENTIALS OF DIAGNOSIS

1. Acute onset of scrotal pain and unilateral swelling on the affected side.
2. Marked tenderness on palpation of the spermatic cord or epididymitis.
3. Pain usually relieved with elevation of the testis.
4. A hydrocele may be present.
5. Fever (to 104°F) may develop.
6. Urethral discharge may be present.
7. Symptoms of cystitis or prostatitis may accompany the scrotal symptoms.
8. The testis usually lies in the normal position.

C. LABORATORY TESTS

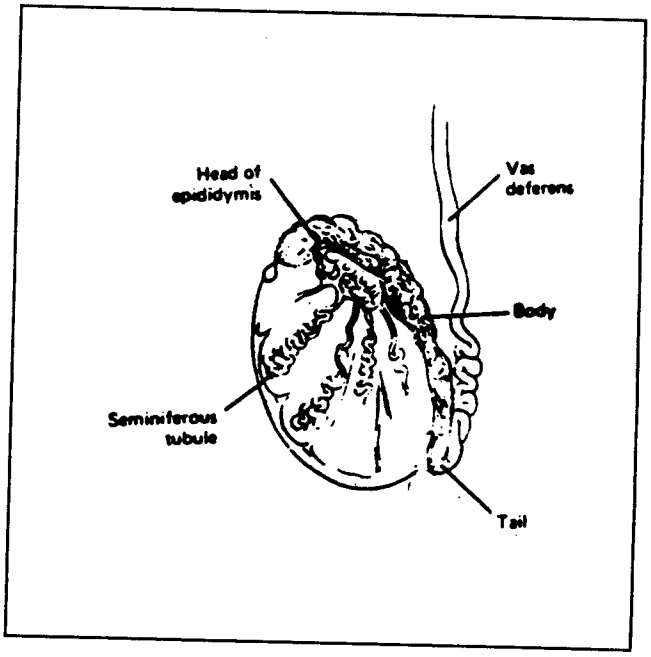
1. Do as much of a "Big 5" workup as you have the facilities for (UA, TM, GS, RPR, C&S).

D. LABORATORY FINDINGS

1. The UA may show bacilluria & pyuria. The other tests R/O GC, syphilis.

E. COMPLICATIONS

1. Sterility may (rare) occasionally result from bilateral infection.
2. Chronic epididymitis.
3. Testicular atrophy (in severe cases when testis becomes involved in inflammatory process).



F. TREATMENT

1. Scrotal support with intermittent ice packs to scrotum.
2. Bed rest until symptoms subside.
3. Ceftriaxone 250mg IM (single dose plus Doxycycline 100mg PO bid X 7 days.
4. Alternate

   a. Tetracycline 500mg PO bid X 21 days.
   b. Septra DS one tab PO bid X 10 days.

5. Motrin for the pain.

G. DISPOSITION

1. If the patient is in severe pain or does not respond to treatment within 48 hours, contact a Medical Officer for possible MEDEVAC.
2. If the pain is not relieved by elevation of the testis, contact a Medical Officer for advice.

GONORRHEA URETHRITIS

A. GENERAL CONSIDERATIONS

Gonorrhea is the most prevalent reportable disease in the United States. It is caused by the gram-negative Diplococcus Neisseria Gonorrhea. Transmitted by sexual contact, its peak incidence is in the 15-29 year old age group. The incubation period is 2-8 days.

B. ESSENTIALS OF DIAGNOSIS

1. As many as 50% of the MALES are asymptomatic. Many females are asymptomatic.
2. Dysuria with a purulent urethral discharge is common.
3. Females may present with full blown PID (pelvic inflammatory disease).
4. Joint involvement is possible.

C. LABORATORY TESTS

1. Gram stain of discharge.
2. C&S of urine and TM if facilities are available.
3. Urinalysis.
4. RPR (repeat in 6 weeks).

D. LABORATORY FINDINGS

1. Gram negative intracellular (and extracellular) diplococci.
2. If facilities are available.
3. Pyuria.
4. To rule out coexistent disease.

E. COMPLICATIONS

1. Males - prostatitis, epididymitis, proctitis, urethral strictures.
2. Females - salpingitis, sterility, increased rate of ectopic pregnancy.
3. GC arthritis, endocarditis, meningitis, sepsis.

F. TREATMENT

1. Ceftriaxone 250mg IM (single dose)
   plus
   Doxycycline 100mg PO bid X 7 days.

NOTE: If evidence of systemic infection, (ie: gonococcal arthritis) increase Ceftriaxone dosage to 1000mg IM (single dose)

G. DISPOSITION

1. Complete the venereal disease interview and associated forms.
2. If treatment is unsuccessful, contact a Medical Officer.

GRANULOMA INGUINALE

A. GENERAL CONSIDERATIONS

Granuloma inguinale is a chronic, relapsing, granulomatous anogenital infection caused by Calymmatobacterium (Donovania) granulomatis. The incubation period is 8 - 80 days, (usually 30 - 60 days). Other venereal diseases may coexist. For more detailed discussion, see NAVMED P-5052-11A.

B. ESSENTIALS OF DIAGNOSIS

1. Insidious onset of relatively painless lesions on the skin or mucous membranes of the genitalia or perineal area.
2. Initial lesion may be a vesicle, papule, or nodule on the skin or mucous membrane.
3. The skin surface erodes, leaving a shallow, sharply demarcated ulcer with a beefy-red friable base of granulation tissue.

C. LABORATORY TESTS

1. C & S if facilities are available.
2. RPR at first visit and repeated in 6 weeks.

D. LABORATORY FINDINGS

1. C & S may reveal causative organism.
2. RPR should be negative.

E. COMPLICATIONS

1. Superinfection.
2. Superimposed malignancy.
3. Elephantiasis of the genitalia.
4. In resistant or untreated cases, massive extension of the lesion may result in anemia, cachexia, or death.

F. TREATMENT

1. Administer Erythromycin or Tetracycline 500 mg PO QID x 21 days.
2. Alternative is 400 mg Sulfamethoxazole/80 mg Trimethoprim (2 PO bid x 21 days).
3. NOTE: Penicillins are not effective.

G. DISPOSITION

1. Complete venereal disease interview and treat or refer contacts.
2. If patient does not respond to treatment, contact a Medical Officer and the nearest Naval Preventive Medicine Unit.
3. If complications are present or develop, contact a Medical Officer ASAP.

HYDROCELE

A. GENERAL CONSIDERATIONS

A hydrocele is an abnormal accumulation of fluid within the scrotum (actually within the tunica or processus vaginalis). It commonly affects men over the age of 40. It may occur secondary to injury or inflammation or complicate testicular neoplasm.

B. ESSENTIALS OF DIAGNOSIS

1. Nontender soft cystic mass within the scrotum.
2. The mass will transilluminate.
3. Careful palpation of each testicle and careful scrutiny of the outline of the testicles on transillumination fail to reveal any abnormality suggesting testicular tumor.

C. LABORATORY TESTS

1. None.

D. LABORATORY FINDINGS

1. None.

E. COMPLICATIONS

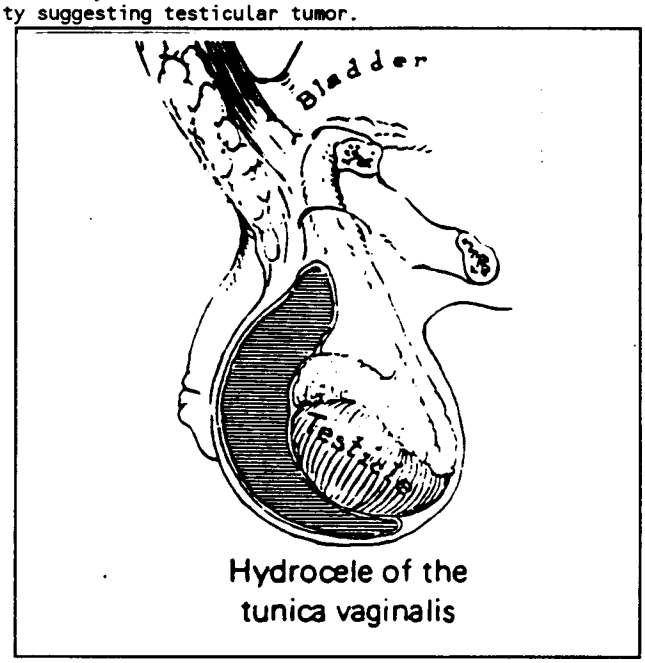
1. None

F. TREATMENT

1. When one first is noticed, recheck at weekly intervals for 2-3 weeks to assess the rate of fluid collection and to carefully confirm the absence of a tumor.
2. Scrotal support.
3. Reassure the patient.
4. Recheck if the symptoms change.

G. DISPOSITION

1. Arrange for consultation with a Medical Officer in the next port.
2. MEDEVAC immediately if a mass is noted or if the hydrocele is rapidly enlarging.



Hydrocele of the tunica vaginalis

LYMPHOGRANULOMA VENEREUM

A. GENERAL CONSIDERATIONS

Lymphogranuloma venereum is an acute and chronic sexually transmitted disease caused by Chlamydia trachomatis, types L1-L3. After the genital lesion disappears, the infections spreads to the lymph nodes of the genital and rectal areas. The disease is acquired during intercourse or through contact with contaminated exudate from active lesions. The incubation period is 5-21 days. Inapparent infections and latent disease are not uncommon in promiscuous individuals.

B. ESSENTIALS OF DIAGNOSIS

1. Genital lesion - This is a small painless vesicle. It can show up as a small ulcer or papule. The lesion typically appears within 3 weeks of exposure. The lesion often goes undetected by the patient.
2. Buboes - The disease spreads from the primary site to the regional nodes causing suppurative lymphadenitis. The most common presentation (in heterosexual men) is a unilateral inguinal involvement. Draining fistulas are a common occurrence.
3. Females and homosexual men often develop anorectal involvement, with proctitis and rectal strictures.
4. Systemic symptoms - Fever, chills, myalgias, arthralgias, and anorexia are common during the lymphadenitis stage.

C. LABORATORY TESTS

1. Complement fixation and the Frei skin test (if facilities are available) are not the definitive tests. Isolation of the organism is.
2. Do as much of the "Big 5" workup (UA, urine C&S, TM, GS, and RPR) as you have available to you. Remember that STD's often come in pairs. Repeat the RPR in 6 weeks.
3. WBC

D. LABORATORY FINDINGS

1. They may be positive or negative. Their significance is debated by many.
2. You may have more than one disease going on. Also, the RPR may be falsely positive.
3. Usually shows a leukocytosis.

E. COMPLICATIONS

1. Ulcerative proctitis.
2. Genital elephantiasis.
3. Rectal strictures, fissures, fistulas and abscesses occur in females and homosexual males. (in females due to the lymph drainage pattern and/or rectal intercourse).
4. May be confused with chancroid.

F. TREATMENT

1. Place patient at bed rest.
2. Apply warm compresses to buboes.
3. Aspirate fluctuant nodes using aseptic techniques (after consulting with a Medical Officer). If you do not aspirate these, they will frequently rupture through to the skin.
4. Doxycycline 100mg PO bid X 28 days.
5. Alternate

   a. Tetracycline 500mg PO qid X 28 days
   b. Erythromycin 500mg PO qid X 28 days

G. DISPOSITION

1. Contact a Medical Officer for further advice and possible MEDEVAC.

UROLITHIASIS

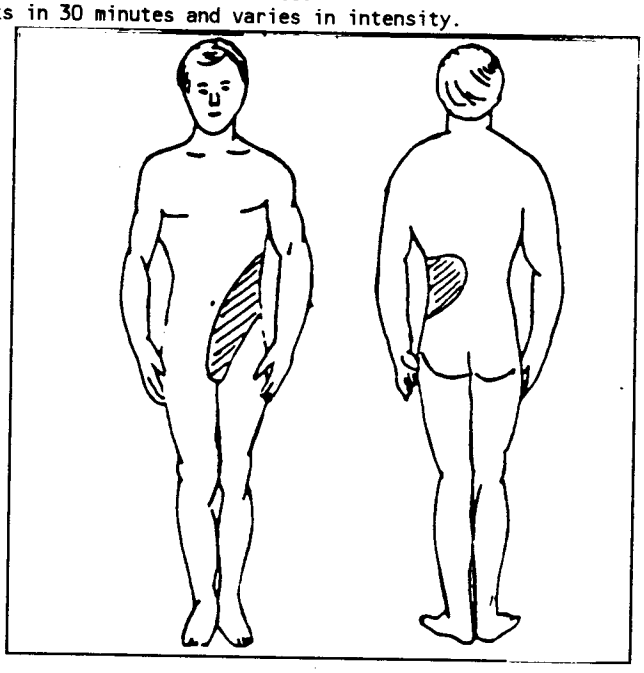
A. GENERAL CONSIDERATIONS

Urolithiasis is a common disorder of the urinary tract resulting from calcium oxalate, calcium oxalate/phosphate, or uric acid stones forming in the kidney, ureters, or bladder. Calcium stones (and uric acid stones) are formed primarily by males. Average age of onset is in the third decade of life. Those who form stones are very likely to do so again. Usually they form every few years. This disease may run in families.

Not all stones cause symptoms. It is not uncommon to find them in X-rays taken for other reasons. They do, however, represent a significant cause of asymptomatic hematuria. Most stones do indeed cause symptoms (pain and hematuria) once they enter the ureter.

B. ESSENTIALS OF DIAGNOSIS

1. You may obtain a history of stones in the patient or his blood relatives.
2. The pain typically begins gradually, then peaks in 30 minutes and varies in intensity.
3. The pain is severe, crampy and sharp. It may radiate from the flank to the groin.
4. The patient is in severe pain and can't find a comfortable position.
5. Gross or microscopic hematuria.
6. Nausea and vomiting are common.
7. Exam may reveal muscle guarding and tenderness on deep palpation.



C. LABORATORY TESTS

1. CBC.
2. Urinalysis.
3. Strain all urine for stones.
4. Draw a baseline BUN and Creat.

D. LABORATORY FINDINGS

1. If the white count is elevated, infection is indicated.
2. Urinalysis shows blood. May show infection.
3. Save all stones for analysis.
4. May aid in the assessment at the treatment facility.

E. COMPLICATIONS

1. If fever, chills and pyuria coexist, this is a medical emergency. Sepsis and extensive kidney damage may result.
2. Reoccurring stone formation.

F. TREATMENT

1. Increase fluid intake. Begin an IV of Lactated Ringer's, bolus 500 - 1,000cc then run at 125cc/hr.
2. Give Tylenol with 30mg Codeine for pain.
3. Give Meperidine 2mg/kg q 4 hours for pain if nauseated or if unable to take liquids orally.
3. Monitor input/output.
4. Strain all urine.

G. DISPOSITION

1. If infection coexists, contact a Medical Officer for an immediate MEDEVAC and antibiotic therapy.
2. Contact a Medical Officer for MEDEVAC if the stone is not passed within 24 hours.
3. If the stone is passed, refer the patient at the next convenient time.

NONGONORRHEAL URETHRITIS

A. GENERAL CONSIDERATIONS

Nongonorrheal urethritis is an infection of the urethra by an organism other than gonorrhea. E. coli and chlamydia are the causative organisms in the majority of the cases.

B. ESSENTIALS OF DIAGNOSIS

1. Male symptoms:

   a. Mild to severe dysuria.
   b. Slight mucopurulent (especially in the morning) to copious purulent discharge.
   c. Red urethral meatus.
   d. Hematuria may occur.

2. Female symptoms:

   a. Most females are symptomatic.
   b. Vaginitis, cervicitis or urethritis.
   c. Mild dysuria.
   d. Dyspareunia.
   e. Pelvic inflammatory disease (PID) may be the presentation.

C. LABORATORY TESTS

1. Perform as much of the "Big 5" as you have facilities for (UA, TM, GS, RPR, Urine C&S).
2. Repeat the RPR in 6 weeks.

D. LABORATORY FINDINGS

1. The discharge of the male shows many polymorphonuclear leukocytes and epithelial cells without the presence of pathologic organisms. The urine shows pyuria without evidence of higher urinary tract involvement. The TM, RPR, and urine C&S are normal. The cervical discharge of the female shows many leukocytes without pathologic organisms.
2. To rule out coexistent syphilis (remember that STD's frequently come in pairs).

E. COMPLICATIONS

1. PID, sterility, and sepsis in the female.
2. Epididymitis, prostatitis, urethral strictures.
3. Reiter's syndrome.

F. TREATMENT

1. Doxycycline 100mg PO bid X 7 days
2. Alternate

   a. Erythromycin 500mg PO qid X 7 days
   b. Tetracycline 500mg PO qid for 7 days.

3. The patient should refrain from unprotected intercourse until treatment is completed. All sexual contacts should seek medical attention promptly.
4. Repeat the tests and exam 10 days after the initial treatment if persistent or recurrent symptoms, give Doxycycline 100mg PO daily for 3 weeks.

G. DISPOSITION

1. If complications develop, contact a Medical Officer for further advice.
2. If the patient fails to respond to therapy or relapses again, contact a Medical Officer for further advice.

ORCHITIS

A. GENERAL CONSIDERATIONS

This is an inflammation of the testis. This can result from infectious (mumps being the most common) or nonspecific inflammatory processes (granulomatous orchitis, occurs in older men). The route of infection can be from direct spread or by hematogenous (as in mumps) spread.

Mumps is the most common infectious cause of acute orchitis. This occurs in adolescent boys and young men (3-4 days after the parotitis develops). About 25% of young men who contract mumps will indeed develop orchitis.

Other organisms that commonly cause orchitis are: gram negative bacteria and Chlamydia trachomatis. It can also result from gonorrhea, UTI, and prostatitis. Other rare cause include: tuberculous epididymitis, syphilitic gummas and mycotic diseases.

B. ESSENTIALS OF DIAGNOSIS

1. Sudden onset of scrotal pain, redness and swelling.
2. Urinary symptoms are absent.
3. Frequently occurs with or after another infectious disease.
4. Fever (to 104^{0}F), prostration.
5. Unilateral or bilateral.
6. A hydrocele may develop.
7. Elevation of the testicle does NOT relieve the pain.

C. LABORATORY TESTS

1. CBC.
2. Urinalysis.

D. LABORATORY FINDINGS

1. White count may be increased.
2. Urinalysis is typically normal. You may, however, see mild proteinuria and microscopic hematuria.

E. COMPLICATIONS

1. Sterility.

F. TREATMENT

1. Bed rest.
2. Scrotal support.
3. Heat.
4. Motrin, aspirin, prn.
5. If due to bacterial infection (not mumps):

   a. Ceftriaxone 250mg IM (single dose)
      plus
      Doxycycline 100mg PO bid X 7 days

6. Alternate

   a. Tetracycline 500mg PO qid for 7 days.

G. DISPOSITION

1. If the patient does not show improvement in 24 hours, contact a Medical Officer.

PROSTATITIS

A. GENERAL CONSIDERATIONS

Prostatitis, which may be acute or chronic, is a bacterial infection of the prostate gland. The two most common ways for the bacteria to reach the prostate are (1) ascent from the urethra, (2) reflux of infected urine into the prostatic ducts. Prostatitis is commonly associated with bacterial infections of the lower urinary tract. It is a difficult infection to eradicate, and acute prostatitis commonly develops into chronic prostatitis.

B. ESSENTIALS OF DIAGNOSIS

1. Acute prostatitis

   a. Fever, low back pain, perineal pain, urgency, frequency, nocturia, dysuria, and some degree of bladder outlet obstruction.
   b. Palpation reveals an enlarged, tender, indurated, hot prostate.

2. Chronic prostatitis

   a. Some of the patients are asymptomatic, the infection is detected on a routine urinalysis.
   b. Symptoms include: dysuria, urgency, frequency, nocturia, low back and perineal pain.
   c. Palpation may reveal a normal, boggy or irregularly enlarged prostate.

C. LABORATORY TESTS

1. CBC.
2. Urinalysis.
3. Gram stain.
4. C&S if facilities are available.

D. LABORATORY FINDINGS

1. In acute prostatitis, the white count is elevated with a left shift. In chronic prostatitis, the CBC is normal.
2. In acute prostatitis, the urine shows pyuria and microscopic hematuria. In chronic prostatitis, the urine is normal or may show pyuria with prostatic massage.
3. In acute prostatitis and chronic prostatitis (with massage), the GS reveals the bacteria.

NOTE: WITH ACUTE PROSTATITIS, MASSAGE OF THE PROSTATE MAY RESULT IN BACTEREMIA AND IS THEREFORE CONTRAINDICATED.

E. COMPLICATIONS

1. Septic shock.
2. Urinary retention.
3. Epididymitis.
4. Pyelonephritis.

F. TREATMENT

1. Antibiotic therapy:

   a. Sulfamethoxazole-Trimethoprim is the first choice. For acute prostatitis, take two tablets bid for at least 30 days. For chronic prostatitis, take two tablets bid for 12 weeks.
   b. Doxycycline 100mg PO bid X 21 days
   c. Parenteral (IV) antibiotics should be administered if the patient is febrile, (i.e. Ampicillin 1gm IV q 4 hours, and Gentamicin 5mg/kg/day.

2. High fluid intake.
3. Sitz baths.
4. Antipyretics as needed.
5. Stool softeners.
6. Anti-inflammatory agents for pain relief.

G. DISPOSITION

1. If a patient does not respond to therapy, contact a Medical Officer for advice.
2. If complications develop, contact a Medical Officer for possible MEDEVAC (depending on the complication).
3. At the next port, arrange for a urological evaluation, even if the patient has responded well to treatment.

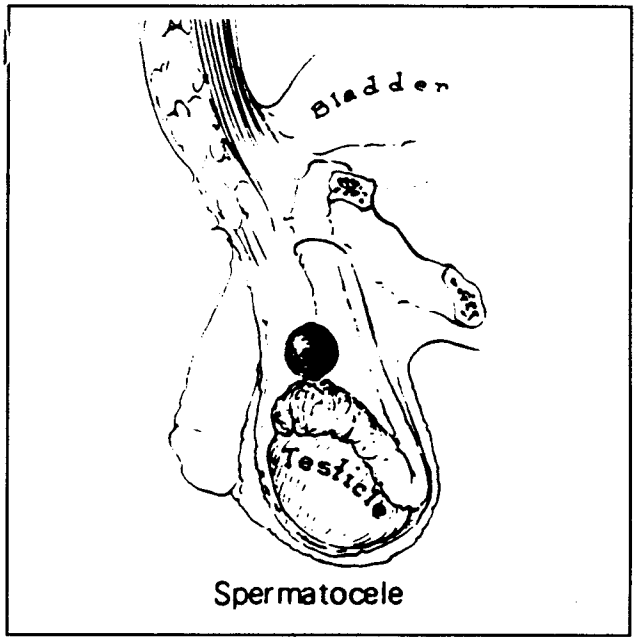
SPERMATOCELE

A. GENERAL CONSIDERATIONS

A spermatocele is a cystic tumor of the epididymis. It is a cystic mass of sperm. It lies just above and posterior to (but separate from) the testis. They are usually small (< 1cm). They can be firm, and mimic a solid tumor.

B. ESSENTIALS OF DIAGNOSIS

1. A painless scrotal mass that DOES transilluminate.
2. It is usually found by the clinician during examination, though it may be found by the patient.
3. It lies above and posterior to the testis.



Spermatocele

C. LABORATORY TESTS

1. None.

D. LABORATORY FINDINGS

1. None.

E. COMPLICATIONS

1. None.

F. TREATMENT

1. None usually needed.
2. Reassure the patient.

G. DISPOSITION

1. Arrange for a consultation with a Medical Officer at the next convenient port.

SYPHILIS

A. GENERAL CONSIDERATIONS

Syphilis is a complex infectious disease caused by Treponema pallidum. It is divided into five clinical stages: primary, secondary, relapsing, latent (hidden), and late (tertiary) syphilis. The incubation period in primary syphilis is 10 - 90 days (average 21 - 28 days). For more detailed discussion refer to NAVMEDCOMINST 6222.1.

B. ESSENTIALS OF DIAGNOSIS

1. Primary syphilis:

   a. History of sexual contact (often unreliable).
   b. Painless ulcer at the contact site (genitalia, perianal area, rectum, pharynx, tongue, lip) 2 - 6 weeks after exposure, that becomes indurated and which heals without treatment in 3 - 6 weeks.
   c. Nontender enlargement of regional lymph nodes.

2. Secondary or relapsing syphilis

   a. Generalized, usually symmetrical, maculopapular skin rash 4 - 8 weeks after exposure.
   b. Lesions on mucous membranes, including patches and ulcers.
   c. Generalized nontender lymphadenopathy.
   d. Fever.
   e. Meningitis, hepatitis, osteitis, arthritis, or iritis.

3. Latent (hidden) syphilis:

   a. No physical signs.
   b. History of syphilis with inadequate treatment.

4. Late (tertiary) syphilis:

   a. Infiltrative tumors of skin, bones, liver (gummas).
   b. Central nervous system disorders, including meningovascular and degenerative changes, paresthesias, shooting pains, abnormal reflexes, dementia, or psychosis.

C. LABORATORY TESTS

1. RPR if facilities are available.
2. VDRL if facilities are available.
3. Treponemal antibody test (FTA-ABS) if facilities are available.
4. Darkfield microscopic examination if facilities are available.

D. LABORATORY FINDINGS

1. RPR is a reliable substitute for a VDRL with comparable results.
2. VDRL is usually positive 4 - 6 weeks after infection. Titer is high in secondary syphilis (greater than 1:32) and low or negative in late syphilis (less than 1:4).
3. FTA-ABS is positive in most patients with primary syphilis and in virtually all patients with secondary, latent, or tertiary syphilis. It usually remains positive, even after successful treatment.
4. Darkfield examination of fresh exudate from lesions of aspirates from regional lymph nodes will reveal T. pallidum organisms in primary and secondary disease.

E. COMPLICATIONS

1. Involvement of any body organ by T. pallidum.
2. Death.

F. TREATMENT

1. Primary, secondary, and relapsing syphilis:

   a. Administer 2.4 million units Benzathine Penicillin G IM.
   b. If patient is penicillin allergic, give Tetracycline 500 mg PO QID x 15 days.

2. Latent and late syphilis:

   a. Administer 3 doses of 2.4 million units Benzathine Penicillin G IM at 7 day intervals.
   b. If patient is penicillin allergic, give Tetracycline 500 mg PO QID x 30 days.

G. DISPOSITION

1. Complete SF 602, Syphilis Record.
2. Complete venereal disease interview and treat or refer all contacts as necessary.
3. If there are any complications, contact a Medical Officer ASAP.

TESTICULAR TORSION

A. GENERAL CONSIDERATIONS

Testicular torsion is an acute twisting of the testis on the spermatic cord. This results in a partial or complete obstruction of the blood supply to the testis. This may occur spontaneously, following exercise, or after minor trauma.

B. ESSENTIALS OF DIAGNOSIS

1. Acute severe local scrotal pain NOT relieved by lifting the scrotum.
2. Nausea and vomiting are usually present.
3. Scrotal edema.
4. The affected testis usually assumes a more horizontal axis, and is elevated in the scrotum.
5. It is very common to get a history of similar symptoms that were self limiting and less intense. This represents torsion with spontaneous reduction.

C. LABORATORY TESTS

1. CBC.
2. Urinalysis.

D. LABORATORY FINDINGS

1. CBC will be normal.
2. Urinalysis will be normal.

E. COMPLICATIONS

1. Loss of testicle due to interruption of the blood supply, with irreversible damage occurring after 12 hours of the onset of the torsion.

F. TREATMENT

1. Monitor and stabilize the vital signs.
2. Attempt manual reduction by counterclockwise manipulation of the right testicle, and clockwise reduction of the left testicle only after adequate sedation.

G. DISPOSITION

1. Contact a Medical Officer and prepare for an immediate MEDEVAC.

NOTE: TREAT ALL SUDDEN ONSET OF SCROTAL PAIN AS A TESTICULAR TORSION UNTIL PROVEN OTHERWISE

TESTICULAR TUMOR

A. GENERAL CONSIDERATIONS

A testicular tumor is an abnormal growth in the testis, occurring most frequently in patients 18-35 years of age. The tumor is often malignant. The incidence is about 0.5% of all types of cancer in males.

B. ESSENTIALS OF DIAGNOSIS

1. The MOST COMMON symptom is painless enlargement of the testis.
2. Transillumination will reveal it to be solid (ie it does NOT transilluminate).
3. A hydrocele may be present.
4. There are a variety of other possible symptoms: weight loss, anorexia, gynecomastia, cough, dyspnea, etc.. Some are related to metastases.

C. LABORATORY TESTS

1. None.

D. LABORATORY FINDINGS

1. None.

E. COMPLICATIONS

1. Early metastasis.

F. TREATMENT

1. Early removal of the tumor PRIOR to metastasis is essential for survival.

G. DISPOSITION

1. Contact a Medical Officer and prepare for an immediate MEDEVAC.

TRICHOMONIASIS

A. GENERAL CONSIDERATIONS

Trichomoniasis is a urinary tract infection caused by the protozoan Trichomonas vaginalis. It is often asymptomatic in males. The chief infection in males is urethritis. It is sexually transmitted, and as with all STD's, it can occur alone or in combination with another STD.

B. ESSENTIALS OF DIAGNOSIS

1. The male typically has symptoms of urethritis:

   a. Dysuria.
   b. Urethral discharge, usually in the morning.
   c. Urinary frequency.

2. The female typically has symptoms of vaginitis:

   a. Vaginal discharge.
   b. Vaginal irritation.
   c. Dysuria may be present.

C. LABORATORY TESTS

1. Perform as much of the "big 5" as you have facilities available (UA, RPR, GS, TM, and urine C&S). Remember that STD's often come in pairs!
2. Wet prep of the vaginal or urethral secretions.
3. Microscopically examine the urinary sediment.

D. LABORATORY FINDINGS

1. In the absence of other disease, these will be negative (with the exception of possibly mild pyuria on the urinalysis).
2. The wet prep (more accurate in the female) demonstrates the motile protozoan.
3. The protozoan is often found only in the urinary sediment.

E. COMPLICATIONS

1. Epididymitis.
2. Bartholin gland infection.

F. TREATMENT

1. Metronidazole 2.0 grams PO as a single dose.
2. Repeat the laboratory tests in 5 days.
3. The sexual partner(s) should be treated at the same time. Condoms should be worn for all intercourse until the infection has been cleared.

G. DISPOSITION

1. If treatment fails, contact a Medical Officer for advice.
2. If complications develop, contact a Medical Officer for advice.

VARICOCELE

A. GENERAL CONSIDERATIONS

This is dilated veins of the spermatic cord. This occurs most often on the left side (97%), with 5% occurring bilaterally. This predominance of the left side is probably due to the sharp angle at which the left spermatic vein enters the left renal vein (the right spermatic vein empties into the inferior vena cava). With a unilateral varicocele on the right, you must rule out an obstruction of the inferior vena cava (ie MEDEVAC these patients for workup).

B. ESSENTIALS OF DIAGNOSIS

1. Painless swelling of the scrotum.
2. A dragging sensation in the scrotum.
3. The scrotum may appear blue.
4. Palpation of the scrotum with the patient standing will reveal a mass that feels like a "bag of worms".
5. The affected testis hangs lower than the other side.
6. The varicocele disappears when you elevate the scrotum and returns when the patient stands up. If it DOES NOT decrease with elevation of the scrotum, suspect intraabdominal tumor or vena caval obstruction - contact a Medical Officer immediately.

C. LABORATORY TESTS

1. None.

D. LABORATORY FINDINGS

1. None.

E. COMPLICATIONS

1. Subfertility, infertility in some cases.

F. TREATMENT

1. Scrotal support.
2. Recheck the patient if symptoms change.
3. Reassure the patient.
4. If the patient has a unilateral right sided varicocele, contact a Medical Officer immediately.

G. DISPOSITION

1. Contact a Medical Officer for consultation when convenient.